Fig.1

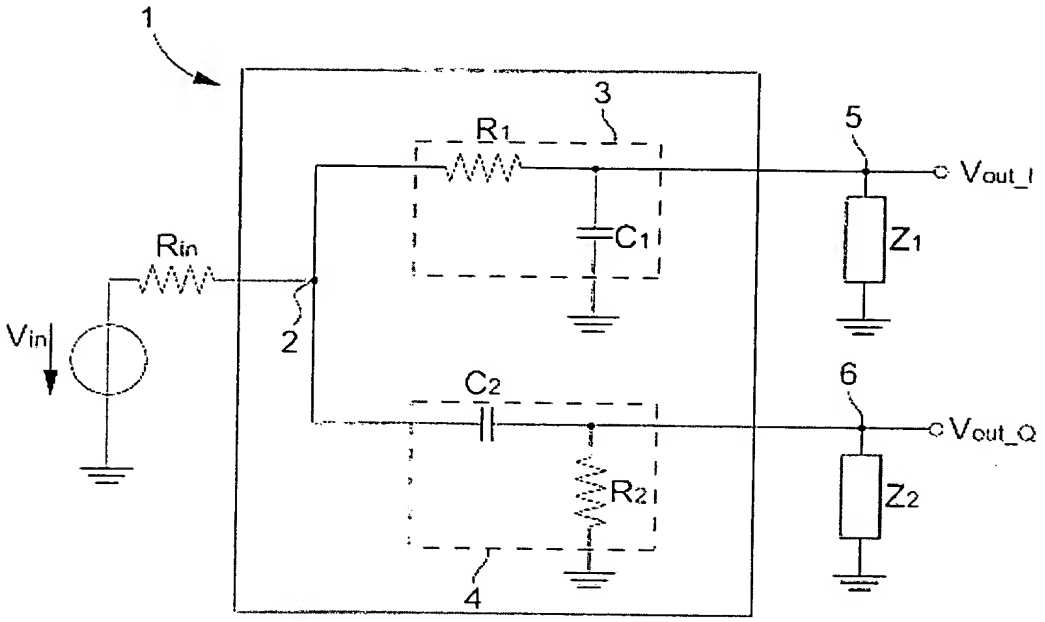

1
3
R1
C1
5
Vout_I
Z1
Rin
Vin
2
C2
6
Vout_Q
R2
Z2
4

Fig.2

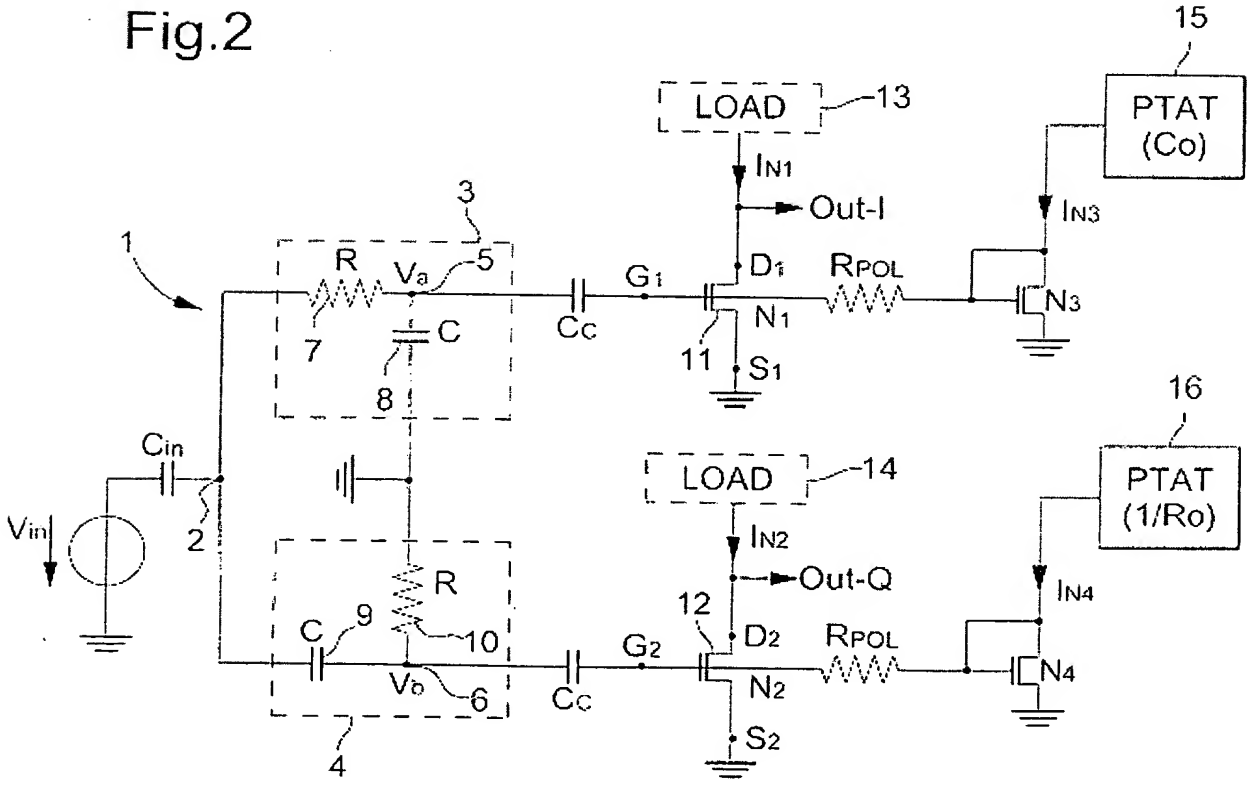

15
PTAT
(Co)
LOAD
13
IN1
Out-I
IN3
1
3
R
Va
5
G1
D1
RPOL
7
C
Cc
N1
N3
11
S1
8
16
PTAT
(1/Ro)
Cin
LOAD
14
Vin
2
IN2
Out-Q
IN4
R
12
C
9
10
G2
D2
RPOL
Vb
6
Cc
N2
N4
4
S2

Fig.3

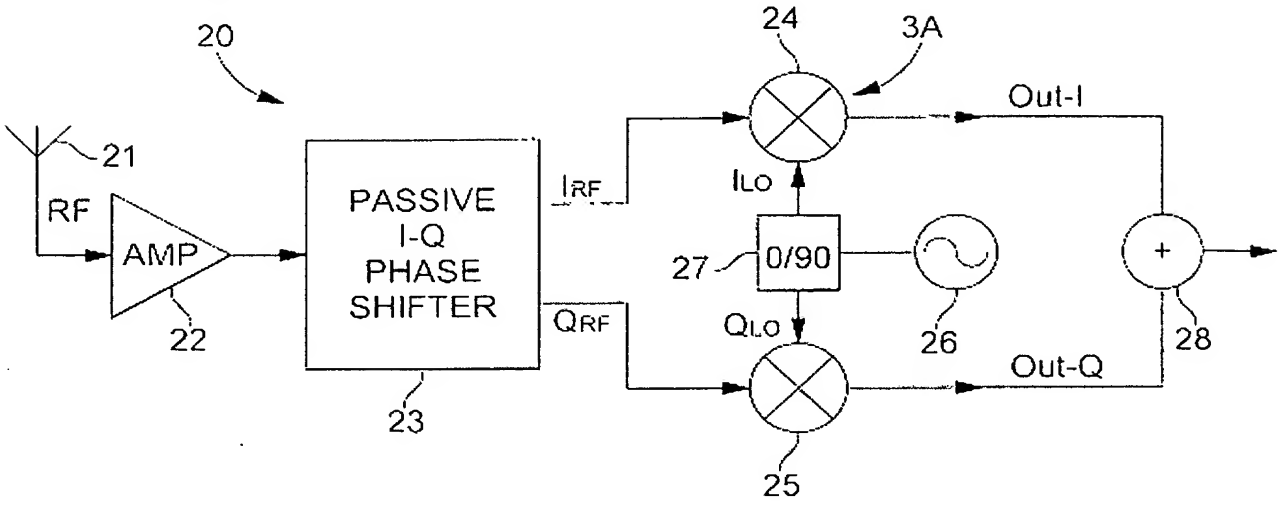

20
21
RF
AMP
22
PASSIVE
I-Q
PHASE
SHIFTER
23
IRF
QRF
24
3A
Out-I
ILO
27
0/90
QLO
26
+
28
Out-Q
25

Fig.3A

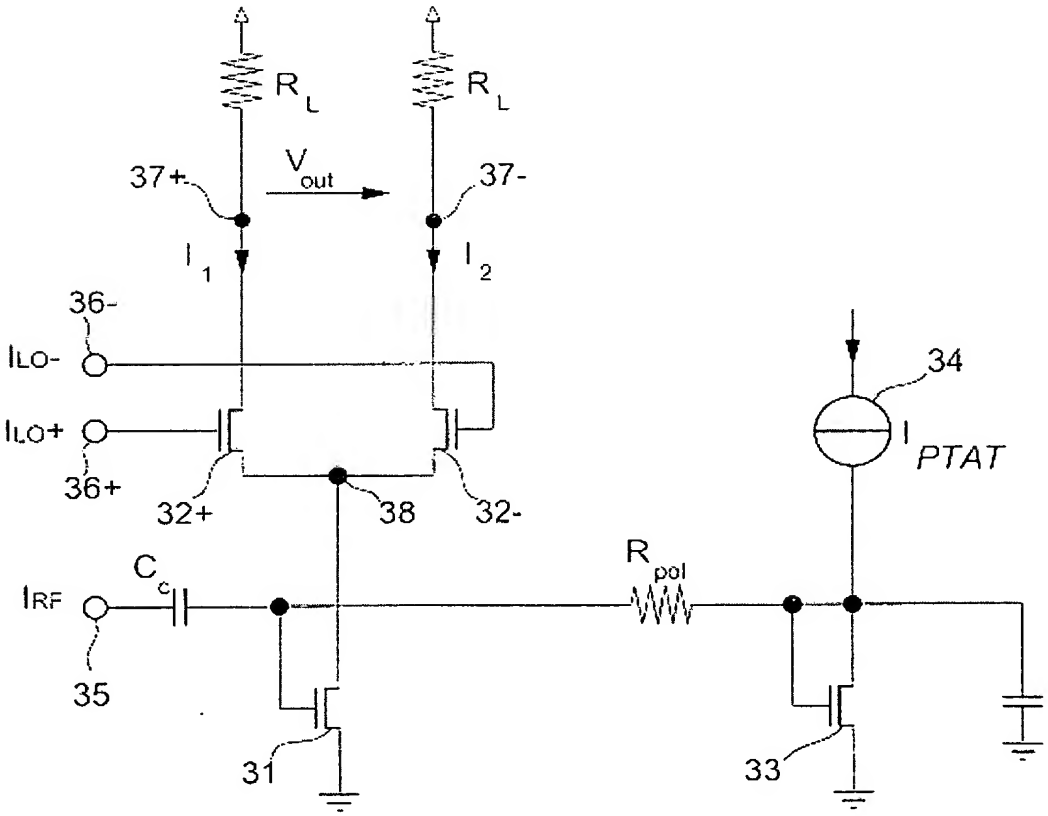

RL
RL
37+
Vout
37-
I1
I2
36-
ILO-
ILO+
36+
32+
38
32-
34
IPTAT
Cc
IRF
35
Rpol
31
33

Fig.4

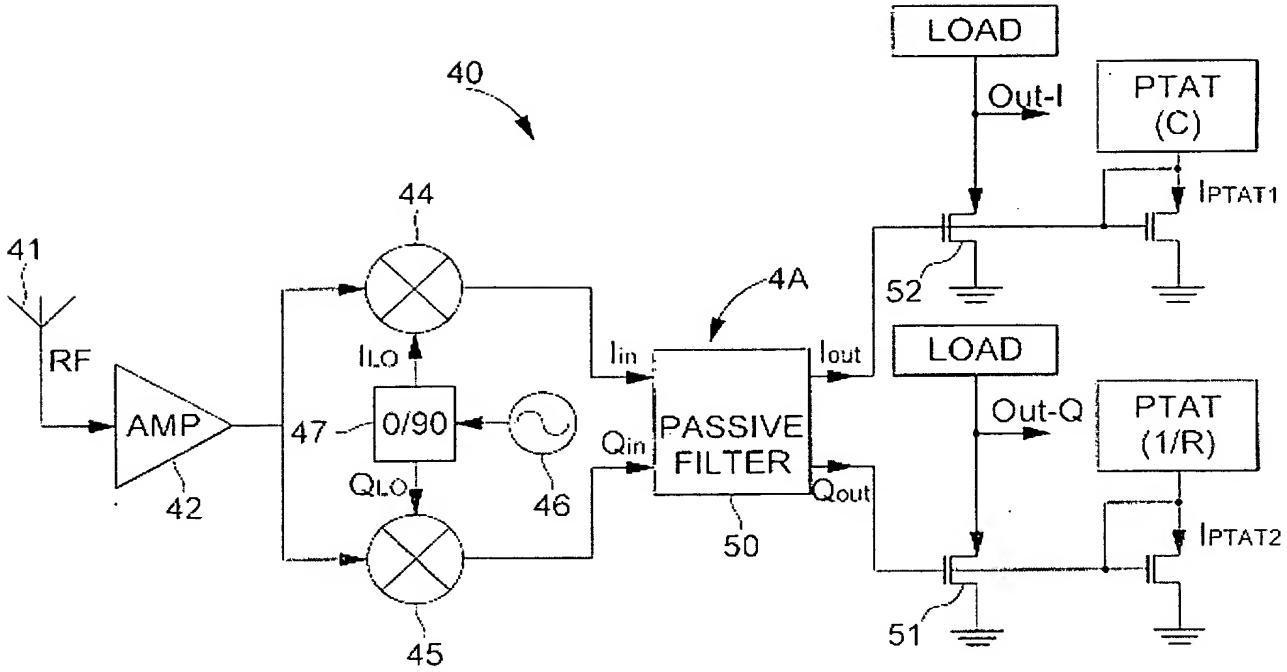

40
41
RF
AMP
42
44
47
0/90
ILO
QLO
46
45
4A
Iin
Qin
PASSIVE
FILTER
50
Iout
Qout
LOAD
Out-I
PTAT
(C)
IPTAT1
52
LOAD
Out-Q
PTAT
(1/R)
IPTAT2
51

Fig.4A

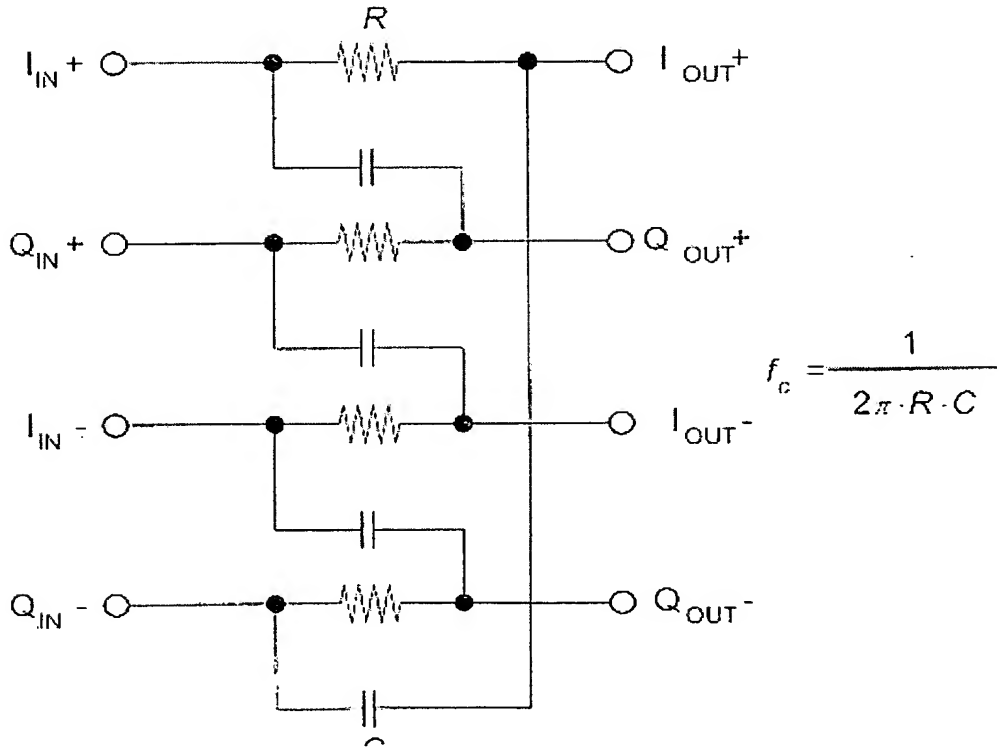

R
IIN +
IOUT+
QIN +
QOUT+
IIN -
IOUT-
QIN -
QOUT-
C
$f_c = \frac{1}{2\pi \cdot R \cdot C}$

Fig.5A

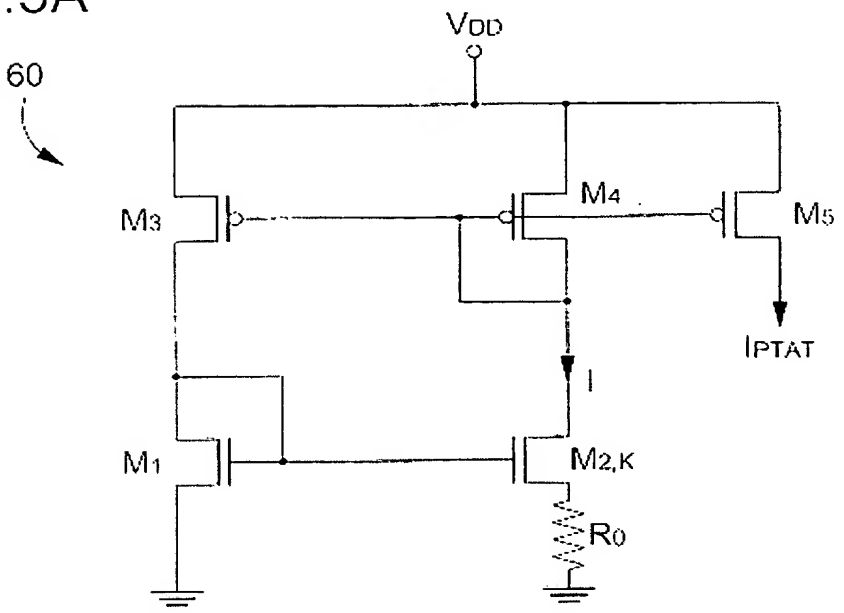
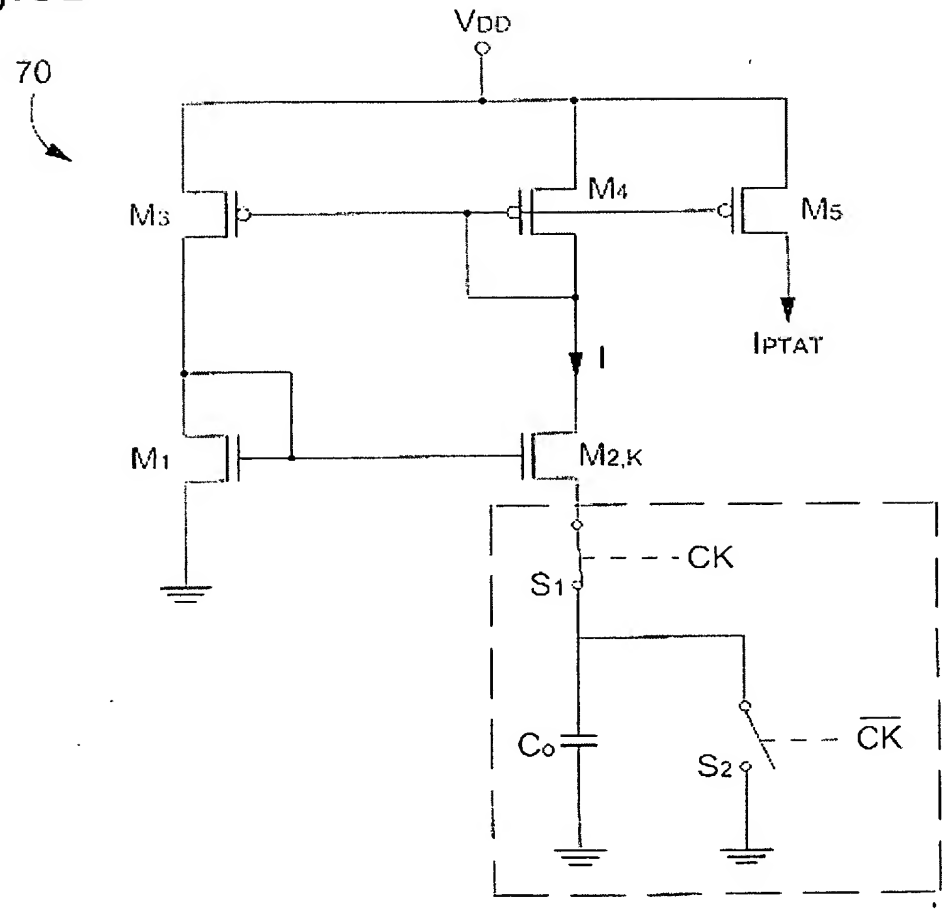

60
VDD
M3
M4
M5
IPTAT
I
M1
M2,K
R0

Fig.5B


70
VDD
M3
M4
M5
IPTAT
I
M1
M2,K
CK
S1
C0
S2
CK